

GZA
GeoEnvironmental, Inc.

Engineers and
Scientists

230764



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**Re: Paint Chip Sampling
Unimatic Manufacturing Company
25 Sherwood Lane
Fairfield, New Jersey**

55 Lane Road
Suite 407
Fairfield, NJ 07004
(973) 774-3300
Fax (973) 774-3350
www.gza.com

Dear Jim:

GZA GeoEnvironmental, Inc. (GZA) is pleased to submit this letter to the United States Environmental Protection Agency (USEPA) regarding the above referenced Site. This letter summarizes the findings of the paint chip sampling that GZA conducted at the facility on May 10, 2011. The objective of the paint chip sampling was to assess whether the wall paint is a contributing source of the polychlorinated biphenyls (PCBs) encountered within the cinder block walls.

PAINT SAMPLING PLAN

Except for the number of paint chip samples collected, the paint sampling was conducted in accordance with the Paint Sampling Plan that GZA sent to the USEPA on April 15, 2011, and the USEPA approved via email later that day. The original plan called for the collection of 30 samples for PCB analysis. On May 6, GZA attempted to implement the Plan. However, GZA was unable to obtain the required volume of paint material from the proposed sampling areas due to the thinness of the paint and the large volume of paint needed to perform PCB analysis. In an email sent that day, GZA requested a reduction in the number of paint samples from 30 to six. The USEPA approved this request via email later that day.

BUILDING CONSTRUCTION

The building is constructed with concrete floors, interior and exterior walls of cinder block, and a steel roof supported by steel trusses. There are six main rooms in the building: the receiving room, the shipping room, the warehouse/inventory area, the pressing room, the machine/tool room and the sorting/packing room. In addition, there are six minor rooms: three bathrooms, the lunch room, the storage room and the screw machine room. The attached figure shows the interior configuration of the facility.

The walls are 16 to 20 feet high, except in two locations: the warehouse, where the walls rise to approximately 30 feet in elevation; and the shipping room, which has a mezzanine area above it and has a clearance of approximately 10 feet.

Most of the cinder block walls and attached piping, conduits, equipment, etc. are covered with off-white paint. All of the painted surfaces inside the building appear to have been painted at the same time.



WIPE SAMPLE FINDINGS

In a pilot test conducted on April 1, 2011, paint was removed from portions of the eastern wall of the warehouse using the SpongeJet™ process. Wipe samples 1A and 1B were collected from the painted cinder block walls prior to removing the paint, and wipe samples 2A and 2B were collected from these same locations after removing the paint. The wipe sampling results are summarized in the table below.

Sample #	Before/After Paint Removal	PCB Conc. (µg/Wipe)
Uni-PCB-1A	Before	0.65
Uni-PCB-1B	Before	2.5
Uni-PCB-2A	After	2.1
Uni-PCB-2B	After	4.6

At sampling location 1, the PCB concentration tripled with the removal of the paint. At sampling location 2, the PCB concentration almost doubled. These results suggest that, rather than being a source for PCBs, the paint was being protective of PCBs, and its removal would result in increased exposure to PCBs for the building inhabitants.

PAINT SAMPLING FINDINGS

The attached figure shows the locations of the paint chip samples. The samples were collected from metal surfaces for ease of sampling. There was no attempt to bias the locations of these samples. The paint chip samples were sent using chain-of-custody procedures to TestAmerica's laboratory in Edison, New Jersey for PCB analysis. The table below compares the results to the USEPA standard for bulk samples of 50 milligrams per kilogram (mg/kg) of total PCBs.

Sample #	Location	PCB standard (mg/kg)	PCB Conc. (mg/kg)
PC-01	North wall, machine/tool room	50	380
PC-02	West entrance to warehouse	50	170
PC-03	West doorway from pressing room	50	39
PC-04	North wall, shipping room	50	48
PC-05	West doorway, receiving room	50	100
PC-06	East wall, sorting/packing room	50	110

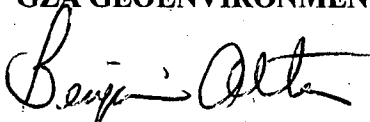
DISCUSSION


Four of the six paint chip samples contained PCBs at concentrations above the USEPA standard of 50 mg/kg. Since not all of the samples contained PCB exceedances, and presuming a uniform painting history for the facility, the paint cannot be the main contributing source of PCBs to the interior. This finding is supported by the testing performed during the SpongeJet pilot test, in which wipe samples collected from the surfaces where paint had been removed had up to three times the concentration of PCBs as did the surfaces before paint removal. It is worth noting that the two samples that did not contain PCB exceedances were located furthest from the warehouse/inventory area, where the kilns had been located when Unimatic used the building, and which is the area considered to be the main source of PCBs to the interior of the building. We believe that the PCBs detected in the paint chip samples originate from PCB-laden dust that we know from wipe sampling conducted in 2005 is present on the steel trusses and other building components. It is also possible that PCBs present in the cinder block walls from releases prior to the banning of PCBs in 1979 dissolved into the paint at the time the walls were later painted.

We therefore conclude that paint is not the primary source of PCBs inside the building. Instead, the paint appears to provide a sealant for PCBs entrained within the cinder block walls of the facility. We recommend avoiding disturbance of the paint on the cinder block walls of the facility.

Do not hesitate to call Ben Alter at (973) 774-3309 if you have any questions or comments regarding the contents of this letter. Thank you.

Very truly yours,
GZA GEOENVIRONMENTAL, INC.


Benjamin Alter, LSRP, PG
Vice President


Dennis I. Rubin, LSRP, PG
Consultant Reviewer

Attachment: Figure

cc: Bill Friedman, Esq., w/figure

FORMER UNIMATIC BUILDING PAINT SAMPLING PLAN



GZA proposes to collect paint chip samples to assess the presence of PCBs in the paint on the interior walls of the former Unimatic building. The objective of the paint survey is to assess whether the wall paint is a contributing source of the PCBs encountered within the cinder block walls. The building is constructed with concrete floors, interior and exterior walls of cinder block, and a steel roof supported by steel trusses. Most of the cinder block walls and attached piping, conduits, equipment, etc. are covered with off-white paint.

There are six main rooms in the building: the receiving room, the shipping room, the warehouse/inventory area; the pressing room; the machine/tool room; and the sorting/packing room. In addition, there are six minor rooms also in the manufacturing portion of the building: three bathrooms, the lunch room; the storage room, and the screw machine room. There are no visible differences in the paint on the substrates in any of the rooms. The walls are 16 to 20 feet high, except in two locations: the warehouse, where the walls rise to approximately 30 feet in elevation; and the shipping room, which has a mezzanine area above it and has a clearance of approximately 10 feet.

We propose to collect a paint chip sample from each wall in each of the six major rooms, and one paint chip sample from a random wall in each of the minor rooms, for a total of 30 paint chip samples. The samples will be collected from random locations and random heights on each sampled wall. There will be no attempt to bias the locations of these samples, except that half of the samples will be collected at low elevations, i.e. less than ten feet above the building floor, and half of the samples will be collected more than ten feet above the building floor.

Because the paint is so tightly-adhered to the cinder block surface, a paint sample cannot be collected without it containing an appreciable amount of substrate. Since the presence of substrate will bias the sampling results, we propose to collect paint samples from piping, conduit, and equipment that are attached to the walls and are presumed to have the same painting history as the cinder block. Because these equipment are impervious, we will be able to collect paint samples without any adhered substrate.

The paint chip samples will be sent to a New Jersey-certified laboratory for PCB analysis. The results will be compared to the United States Environmental Protection Agency standard for bulk samples of 50 milligrams per kilogram (mg/kg) of total PCBs.

